(C) A New Approach to Uncovering WMD Programs

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(S) The National Strategy to Combat Weapons of Mass Destruction (WMD) lays out a daunting challenge: ***"Detect, identify, locate, disrupt, seize, and destroy an adversary's WMD assets, means of delivery, and associated facilities before the weapons are used."*** Many foreign countries hide their true intentions by employing dual-use technology. Advances in science and technology that help the civilian sector can also, for example, make it easier for biological warfare (BW) specialists to make more lethal strains and weaponize them with greater efficiency.

(C) Here's the question: can we model the end-to-end processes used to produce substances for benign civilian use? ...and from that baseline, can we then determine the specific features that would distinguish a Bio Warfare Program from a benign civilian pharmaceutical production effort?

(S) These are some of the questions the Advanced Analysis Lab hopes to answer as it undertakes a collaborative project with:

- Intelligence Analysts from four Product Lines (Middle East North Africa, Proliferation and Arms Control, Regional Targets, and Geospatial Exploitation);
- Modelers using Complex Additive Systems Analysis (CASA); and
- Engineers from Lawrence Livermore National Labs.

(S//SI) As the project unfolds, other colleagues will be included as the need arises. A suspect Iranian BW facility will be chosen for the proof of concept. Computational models will be built to identify and process data that sheds light on the facility's function. Both classified and unclassified sources will be used: email and fax traffic, voice transcripts, imagery, open source publications, and Auto CAD files. CASA will provide a dynamic environment for analyzing this varied data set; this will include developing and validating both engineering and human-oriented models in an integrated environment.

(U//FOUO) The project falls in line with the Advanced Analysis Lab's mandate to create and foster advanced tradecraft. The CASA approach is inherently designed to be applicable across many target sets, so success here could lead to progress against other targets as well.

Note: The National Strategy to Combat Weapons of Mass Destruction can be found in National Security Presidential Directive NSPD-17.